IAP15 Rec'd PCT/PTO 2 0 JUL 2006

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL LETTER TO THE UNITED STATES			ATTORNEY'S DOCKET NUMBER		
DESIGNATED/ELECTED OFFICE (DO/EO/US)		96700/1160			
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		U.S. 19FDCA/16TN 180.01 18W9 2 37 CFR 1.5)			
INTERNATIONAL APPLICATION I PCT/US2005/007365	NO. INTERNATIONAL FIL 7 March 2005 (07.03.2		PRIORITY DATE CLAIMED 11 March 2004 (11.03.2004)		
TITLE OF INVENTION	ENHANCED PRODUCTION OF PROTEINS FROM DEFECTIVE				
APPLICANT(S) FOR DO/EO/US	David S. Lawrence and Biao Xi				
Applicant herewith submits to the	he United States Designated/Elected	Office (DO/EC	O/US) the following items and other information:		
1. This is a FIRST submissi	ion of items concerning a submission unde	er 35 U.S.C. 371			
2. This is a SECOND or SU	BSEQUENT submission of items concern	ning a submission	n under 35 U.S.C. 371.		
3 This is an express reques (5), (6), (9) and (21) indi	st to begin national examination procedure cated below.	es (35 U.S.C. 37	1(f)). The submission must include items		
4. The US has been elected	d (Article 31).				
5. A copy of the Internation	onal Application as filed (35 U.S.C. 371(c)(	(2))			
a. 🗹 is attached he	ereto (required only if not communicated b	by the Internation	nal Bureau).		
b. has been con	mmunicated by the International Bureau.				
·	d, as the application was filed in the United				
	anslation of the International Application a	as filed (35 U.S.C	C. 371(c)(2)).		
a. Lis attached h					
[ <del>.</del> ]	eviously submitted under 35 U.S.C. 154(d)				
	aims of the International Application under	·			
	d hereto (required only if not communicate	-	tional Bureau).		
, –	communicated by the International Bureau		acata has NOT auried		
	en made; however, the time limit for makir en made and will not be made.	ng sucn amenan	nents has NOT expired.		
[F]	ranslation of the amendments to the claim	ns under PCT Art	ticle 19 (35 U.S.C. 371(c)(3)).		
9. An oath or declaration	of the inventor(s) (35 U.S.C. 371(c)(4)).				
. —	An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).				
Items 11 to 20 below concern	n document(s) or information included:	:			
11. An Information Disclose	ure Statement under 37 CFR 1.97 and 1.9	98.			
12. An assignment docume	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.				
13. A preliminary amendment	A preliminary amendment.				
14. An Application Data Sh	An Application Data Sheet under 37 CFR 1.76.				
15. A substitute specification	A substitute specification.				
	A power of attorney and/or change of address letter.				
17. A computer-readable fo	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.				
	published International Application under 3	35 U.S.C. 154(d)(	(4).		
19. A second copy of the E	English language translation of the internat	tional application	under 35 U.S.C. 154(d)(4).		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 3

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PTO-1390 (Rev. 07-2005)
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111/6868U/		PCT/US2005/007		96700/1160		
20. Other items or information: Copy of the International Search Report and Written Opinion.						
	s have been submitted			CALCULATIONS	PTO USE ONLY	
21. 🗹 Basic national	fee (37 CFR 1.492(a))		\$300	<sup>\$</sup> 300.00		
22. Examination fee	e (37 CFR 1.492(c))					
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0  All other situations\$200				\$ 200.00		
23. Search fee (37 CFR 1.492(b))  If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0  Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority				\$ 100.00		
TOTAL O	F 21 22 and 23 =			\$ 600.00		
TOTAL OF 21, 22 and 23 =  Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).  The fee is \$250 for each additional 50 sheets of paper or fraction thereof.						
Total Sheets Extra Sh	Extra Sheets Number of each additional 50 or fraction thereof (round <b>up</b> to a whole number)				:	
- 100 =	/50 =		x \$250	\$	<u>.</u>	
Surcharge of \$130.00 for fu after the date of commence		th fee, examination fee, or the ge (37 CFR 1.492(h)).	oath or declaration	\$		
- CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	1	
Total claims	- 20 =		x \$50	\$ 900.00		
Independent claims	- 3 =		x \$200	\$ <sub>0</sub>		
MULTIPLE DEPENDENT O	CLAIM(S) (if applicable)		+ \$360	\$		
			CALCULATIONS =	\$1500.00		
Applicant claims small	entity status. See 37 CFI	R 1.27. Fees above are reduc				
SUBTOTAL =				\$ 750.00	<u> </u>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).			\$			
TOTAL NATIONAL FEE =				\$ 750.00		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$		
TOTAL FEES ENCLOSED =				\$ 750.00		
				Amount to be refunded:	\$	
				Amount to be charged	\$	

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a. 🗹	A check in the amount of \$750.00	to cover the above fe	AP20 Rec'd PEI/PIU ZU JUL	41	
ъ. 🗆	Please charge my Deposit Account NoA duplicate copy of this sheet is enclosed.	in the amount of \$	to cover the above fees.		
c. 🔽	The Commissioner is hereby authorized to charge a Account No. 01-1785 . A duplicate copy of this		ay be required, or credit any overpayment to Deposit		
d. 🗆	Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
	Where an appropriate time limit under 37 CFR 1.4 nted to restore the International Application to pe		etition to revive (37 CFR 1.137(a) or (b)) must be filed		
Alan D Amster 90 Par New Y	LLL CORRESPONDENCE TO: . Miller r, Rothstein & Ebenstein LLP k Avenue ork, New York 10016 36-8000		SIGNATURE Alan D. Miller NAME 42,889 REGISTRATION NUMBER		



Intellectual Property Law

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July 20, 2006

Via Express Mail (EL 993158048 US)

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Alan D. Miller Direct 212 336 8094 E-mail amiller@arelaw.com

"Express Mail" mailing label no. EL 993158048 US						
Date of De	posit:	July 2	20, 200	6		
I hereby certify that this paper or fee is being						
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for Patents, P.O. Box 1450, Alexandria, VA 22313-						
1450.		110	\			
Name:	Alan D	Mintel )	1 /1	$\mathcal{N} : \mathcal{N}$		<u>ر</u>
Signature:			$U = I_{I}$	1. 11	1.1	

Re: United States National Stage Filing

of PCT Application No. PCT/US2005/007365

Title: ENHANCED PRODUCTION OF FUNCTIONAL

PROTEINS FROM DEFECTIVE GENES

Applicants: David S. Lawrence and Biao Xi

96700/1160 Our File:

Dear Sir:

Pursuant to 35 U.S.C. § 371 and 37 C.F.R. § 1.495, enclosed please find an application for patent in the names of David S. Lawrence and Biao Xi, entitled "ENHANCED PRODUCTION OF FUNCTIONAL PROTEINS FROM DEFECTIVE GENES," for entering the national stage in the United States of America, comprising the following:

- 1. a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. § 371 (3 pages);
- 2. a copy of PCT Application No. PCT/US2005/007365 as published under PCT Publication No. WO 2005/086768 A2, including cover page (1 sheet), specification (18 pages), claims (5 pages), figures (2 pages) and sequence listing (2 pages); sequence listing on floppy disk;
- 3. a copy of the International Search Report and Written Opinion (10 pages);
- 4. a Preliminary Amendment (3 pages);

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## AP20 Rec'd PCT/PTO 20 JUL 2006

Commissioner for Patents

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- 5. an Information Disclosure Statement Forms PTO/SB/08A and PTO/SB/08B, and copies of the three non-US patent documents listed therein;
- 6. a check in the amount of \$750.00 to cover the filing fee; and
- 7. a return receipt postcard.

Please charge any outstanding amount or credit any overpayment to Deposit Account No. 01-1785. A duplicate copy of this letter is enclosed. Please also acknowledge receipt of the enclosed documents by stamping the enclosed postcard and returning the same to us.

Respectfully submitted,

AMSTER, ROTHSTEIN & EBENSTEIN LLP Attorneys for Applicants 90 Park Avenue New York, New York 10016

(212)(\$36-8000

Dated: New York, New York

July 20, 2006

By: Alan D. Miller

Registration No. 42,889